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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,011	01/20/2004	Yoshikazu Muraoka	118379	6831

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EXAMINER

CHERRY, STEPHEN J

ART UNIT PAPER NUMBER

2863

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,011

Applicant(s)

MURAOKA, YOSHIKAZU

Examiner

Stephen J. Cherry

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 and 7 is/are rejected.
- 7) ☐ Claim(s) 4-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1-7 are objected to because of the following informalities:

Claim 1 is inconsistent with regard to the number and interrelation of the short arms. Initially, at line 5 of the claim, a plurality of short arms is claimed. The examiner is interpreting "plurality" to include two or more. At line 6, a single short arm is referred to. Line 9 later refers to "a proximal short arm" and "the other short arm" (lacking antecedence). It is not clear if the "proximal" arm is included in the "plurality of short arms", and the language, "a" and "the other", imply that there are two short arms, establishing a range (two) within a range (plurality).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 887,994 to Bartram.

Claim 1 recites, as disclosed by Bartram:

1. A measuring instrument, comprising: an arm provided with a detector at a distal end thereof ('994, 14); and a support for supporting the arm in a manner movable in the axial direction thereof ('994, 3), the measuring instrument measuring a dimension of a workpiece based on the position of the detector ('994, line 105), wherein the arm includes a plurality of short arms sequentially disposed on the support, the short arm being respectively supported in a manner movable relative to a former component thereof ('994, fig. 1, 7-9), and wherein the measuring instrument has drivers for independently moving a proximal short arm and the other short arm in the axial direction of the proximal short arm ('994, 11-13).

Claim 2 recites, as disclosed by Bartram:

2. The measuring instrument according to claim 1, wherein the drivers are synchronous drivers that are synchronously driven, and the proximal short arm and the other short arm are driven in an interlocking manner ('994, fig. 1, 7-9 driven simultaneously by 11-13).

Claim 3 recites, as disclosed by Bartram:

3. The measuring instrument according to claim 2, wherein the short arm includes a first short arm supported by the support and a second short

arm provided next to the first short arm and having the detector at a distal end thereof ('994, 7-8), and wherein the synchronous driver has a first moving mechanism for moving the first short arm in the axial direction and a second moving mechanism for moving the second short arm in the same direction as the moving direction of the first short arm in synchronization with the first moving mechanism ('994, 11-13).

Claim 6 recites, as disclosed by Bartram:

6. The measuring instrument according to claim 5, further comprising air bearings provided between the support and the first short arm and between the first short arm and the second short arm ('994, air space between 3 and 7-9).

Claim 7 recites, as disclosed by Bartram:

7. The measuring instrument according to claim 3, further comprising a cover that covers the second short arm from the distal end of the first short arm to the distal end of the second short arm, the cover being stretched and contracted in the moving direction of the second short arm in accordance with the movement of the second short arm ('994, 10).

Conclusion

Art Unit: 2863

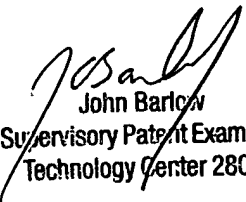
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents 3,658,429 to Zipin, 3,940,982 to Hironaka, 4,702,009 to Dighton et al., 5,615,489 to Breyer et al. and 6,272,766 to Tondorf et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Cherry whose telephone number is (571) 272-2272. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJC


John Barlow
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Technology Center 2800